

REMARKS

In the present amendment claims 1, 2, 17 to 19 and 43 to 65 are under consideration. Claim 1 has been amended to delete reference to numbers; also, wording has been added at the end of the claim to introduce means to cause the third winding roll to position and align. Antecedent support is present in claim 3 which is canceled.

In the various claims, wording of "characterized in that" has been canceled; also, reference to numbers has been deleted.

Support for newly introduced claims 43 to 58 is as follows:

Amended Claim	Support in original claims
1	1 + 3, but one feature of original claim 1 was deleted
43	27
44	26
45	25
46	4 + 5
47	26
48	25
49	generalization of 31, 33 and 35
50	39
51	40
52	30+ 31
53	32 + 33
54	34 + 35
55	36
56	37
57	38
58	1 + 27, but one feature of original claim 1 was deleted (the same as for amended claim 1)
59	26
60	4 + 5
61	25
62	2
63	26
64	4 + 5
65	25

DRAWING SUBMISSION

Accompanying the present amendment in a separate paper is a submission of new drawings to replace Figures 1a, 1b, 1c, 1d, 1e, 2, 3, 4, 5, 6a and 6b of record in the present patent application.

Also, as will be more fully explained below, accompanying the present amendment is a new proposed drawing, labeled 1F, submitted for the Examiner's approval.

RECONSIDERATION OF OBJECTIONS AND REJECTIONS

Reconsideration is respectfully requested of the objections and rejections set forth in the outstanding Office action.

Paragraph 1 of the Office action sets forth a requirement for an Abstract in proper form. Due to the number of changes in the patent application, it is believed that a substitute application will need to be filed. The following abstract is proposed for the substitute patent application:

ABSTRACT OF THE DISCLOSURE

Apparatus for winding a web (1) on a winding roll (2), comprises at least a first and a second roll (3, 4) and a third roll (5), said first roll being located on one side and said second roll and said slender roll being located on the other side of the path of said web in course of winding on said winding roll. Said first and second rolls and said third roll are movable towards each other and towards said winding roll, so that said third roll is sandwiched between said winding roll on one hand and said first and second rolls on the other hand, said web passing between said first roll and third roll and then between said third roll and said winding roll. Means cause said third roll to position and align freely between said first and second roll and said winding roll.

Paragraph 2 of the Office action sets forth a requirement as follows:

“Therefore, angles, planes and intersections referred to in claim 1, and the subject matter of claim 15 relating to the axis of the winding roll located at a higher level than the axis of the third

roll must be shown or the feature(s) canceled from the claim(s).
No new matter should be entered.”

In reply, claim 15 has been cancelled; accordingly, the requirement is no longer believed present.

However, accompanying the present amendment is a new proposed drawing for the Examiner's approval. The drawing portrays an enlarged view of rolls 2, 3, 4 and 5 of Figure 1E on which each angle, plane and intersection line is indicated. No new matter is believed involved with explanatory language present for such angles, planes and intersection lines. Also, in the substitute patent application, it is proposed to add the following wording following page 3, line 6:

“Figure 1F illustrates the angles, planes and intersection lines regarding the apparatus of Figures 1a to 1e.”

Paragraph 5 of the Office action sets forth a rejection of claims 1 to 19 and 30 to 43 under 35 USC 112, first paragraph. The Office action states:

Specifically, it is not clearly understood exactly what is being claimed, since the angles, planes and intersections referred to in claim 1 are nowhere described or shown, and it is not clear exactly how the second angle is defined.

Paragraph 6 of the Office action sets forth a rejection of claims 1 to 19 and 30 to 43 under 35 USC 112, second paragraph. The Office action states:

Claim 1 is unclear as to exactly where the second angle is located, it is not clear exactly what “half-planes” are, and the use of the term “delimited” is not understood. Furthermore, it is not particularly clear where the “intersection line” is located. Claim 6, line 2 and claim 7, lines 2 and 7, “the bearings” are without antecedent basis. Claim 15, line 5, “reported” is unclear. Method claims 30, 32, 34, 38-42 are written as a series of results rather than positive method steps for performing the various functions or results, rendering these claims unclear as to exactly what is being claimed.

The rejections under 35 USC 112, first and second paragraphs, are hereby traversed. Independent claim 1 defines the relative locations of the first roll, second roll, third roll and winding roll in their nominal winding position. Accordingly, claim 1 gives a precise definition of the location of each roll with respect of the other rolls in a geometrical manner.

A person skilled in the art is able to understand these geometrical definitions and to carry them out only by reading claim 1.

In response to the 35 USC 112 rejection concerning use of the wording “half plane”, such terminology is conventional in the art to which the present invention is applicable. The wording has clear and definite wording such as present in Merriam-Webster’s Online Dictionary (freely accessible on www.britannica.com) defining a half plane (date: 1891) as being:

the part of a plane on one side of an indefinitely extended straight line drawn in the plane

The type of wording used in claim 1 for defining the first, second, third and fourth half-planes is each time in the form:

a half-plane delimited by a first line and comprising a second line

in view of the fact that the axis of each roll forms a line.

Such a wording is unambiguously understood by the person skilled in the art as follows:

said first and said second line define together a plane and said half plane is the part of said plane on the side of the first line which comprises the second line.

Thus, it is believed that the person skilled in the art clearly understands the definition of each half-plane given in claim 1.

Regarding the second angle, the definition given of it in claim 1 with reference to the third and fourth half planes is clear. Indeed, the definition of each of these half planes is given in the form mentioned previously.

Regarding the fourth half plane, the definition involves an intersection line which is clearly defined in claim 1. Indeed, the intersection line is defined as being:

the intersection between the bisector plane of said first angle and the plane comprising the axis of said first roll and the axis of said second roll.

As well known, the intersection of two planes results in a line. Further, both of these planes are unambiguously defined. In particular, the bisector plane of said first angle is understood by the person skilled in the art according to the usual meaning of bisector, i.e. that divides in two equal parts said first angle (See e.g. the Merriam-Webster’s Online Dictionary).

Since claims 1 and 58 are the sole independent claims, the dependent claims likewise comply with both paragraphs of 35 USC 112 by setting forth preferred embodiments of the present invention.

It may be helpful to summarize applicant's advance in the art. The invention provides an apparatus allowing to winding of thin webs on a winding roll at high speed. Such high speed winding raises the problem of obtaining a good spreading of the web on the winding roll to prevent wrinkles in the web during winding and to prevent air trapped between the winded layers of web on the winding roll.

The problem is mainly solved by using a first roll (such as a pack roll) applying the web on the winding roll, the first roll being backed by two other rolls to avoid possible bending and vibrating of the first roll which would adversely affect the web winding friction on the web, variations of tension in the web, bad effects regarding the spreading of the web as well as the air entrainment (with support on page 7, lines 8 to 19 of the present patent application).

Claim 1 and claim 58 cover this configuration by way of a precise geometrical definition.

Further, another problem of the invention is to facilitate the initiating of the winding on the winding roll. Therefore, the apparatus has an open state as claimed in claim 2 which allows an easy access to the winding roll. Thus, an end of the web can be easily applied on the winding roll either automatically or manually and then the apparatus is caused to get in the closed state, i.e. the nominal working position defined in claim 1.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Accompanying the present amendment is a supplemental information disclosure statement to make the following publications of record to be considered in examination of this patent application.

German DE 43 43 173 (English translation)
USP 5,039,023

Also cited in the Supplemental Information Disclosure Statement is a document entitled Air Entrainment with A Forced-Loaded Nip Roller, Y. Bae Chang, F. W. Chambers, J. J. Shelton, Web Handling Research Center, Oklahoma State University, 05/1994, pages 33 to 35.

The accompanying attachment dated 13 March 2001 is a note of an informal communication by telephone in the corresponding Patent Cooperation Treaty application PCT/ED00/65436. The note records a conversation of the authorized FPO officer (Mr. Pollet) with applicants representative (Mr. Pochart) as follows:

The authorized officer Mr. Didier Pollet called the representative Mr. Francois Pochart explaining that the closest prior art document (i.e. 'Air Entrainment with a Forced-Loaded Nip Roller', Y. Bae Chang, F. W. Chambers, J. J. Shelton, Web Handling Research Center, Oklahoma State University, 05/1994) cited in the description on page 1, l. 21, could not be retrieved by the EPO search division. Apparently, according to the Web Handling Research Center (contact Mr. Y. Bae Chang), this document is proprietary information and hence not public.

This was a surprise to the representative, who promised to investigate the matter further.

If possible, a copy of the document was asked.

Based on the contents of this note, the document is stated to be "proprietary information and hence not public". Accordingly, it is believed that this document is not available under the provisions of 35 USC 102, as well as the provisions of 35 USC 103. This document is provided in examination of this patent application due to the present fact situation with the document cited in the Background of the Invention.

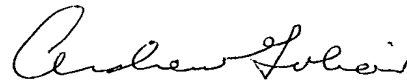
SUMMARY

The present amendment responds to the drawing requirements, and responds to the objections and rejections under 35 USC 112. Approval of a new Figure 1F has been requested.

Furthermore, it is considered a substitute specification will need to be filed due to the numerous editorial changes which are needed. At that time an abstract will be attached as well as reference to Figure 1F following the Examiner's approval.

A supplemental information disclosure statement accompanies the present amendment as well as a submission of formal drawings to replace the informal drawings originally filed. A notice of allowance is solicited.

Respectfully submitted,



ANDREW G. GOLIAN
ATTORNEY FOR APPLICANT
Registration No.: 25,293
Telephone: (302) 892-0747
Facsimile: (302) 892-7343

Dated: October 31, 2003

Enclosures for this Amendment

- (1) Figure 1F
- (2) PCT note dated 13 March 2001
- (3) Web Handling Research Center Document